

Maryland Commercial HMOs and POS Plans: Report to Policy Makers

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ABOUT THIS REPORT

The State of Maryland assesses the performance of Maryland's commercial HMOs and their affiliated point of service (POS) plans in an effort to provide information that supports continuous improvement in the quality of health care. Quality information benefits:

- Consumers, who can optimize their plan selection by using independent, comparative assessments of care delivery for their specific situation
- Employers and employees, who can make value-based health plan choices
- Policy makers, who can evaluate trends within the delivery system

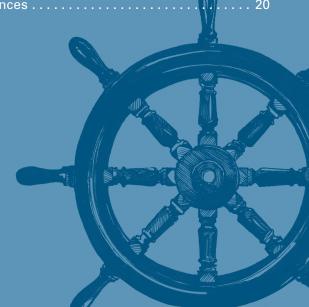
This report contains information on recent trends in managed health care delivery. It also compares health plan performance across a range of health care topics: preventive care at different life stages; behavioral health care; and member satisfaction.

The goals of the *Maryland Commercial HMOs & POS Plans:* Report to Policy Makers are to:

- Compare and assess the average performance of Maryland HMOs and POS plans to the performance of commercial HMOs and POS plans in the Mid-Atlantic region and the nation
- Assess average performance over time for Maryland commercial HMOs
- Identify and analyze issues of particular relevance to health policy development that will guide improvements in the quality of managed care in Maryland

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Introduction

MARYLAND HEALTH PLANS

This report is based on data submitted by the seven health plans operating in Maryland that are required to report performance measurement results to the Maryland Health Care Commission. With the exception of Kaiser Permanente, the information is an aggregate of each plan's combined performance for its HMO and POS products operating under its HMO license. Table 1 shows the total number of members enrolled in each plan and the percentage of members who enrolled in the plan's HMO/POS products.

Table 1: 2005 Commercial HMO/POS Enrollment

Health Plan	Total Number of Plan Members	Percent of Members Enrolled in HMO	Percent of Members Enrolled in POS
Aetna Health Inc.—Maryland, DC and Virginia (Aetna)	312,769	86%	14%
CareFirst BlueChoice, Inc. (BlueChoice) ^a	560,134	57%	43%
CIGNA HealthCare Mid-Atlantic, Inc. (CIGNA)	279,805	66%	34%
Coventry Health Care of Delaware, Inc. (Coventry)	98,903	88%	12%
Kaiser Foundation Health Plan of the Mid-Atlantic States, Inc. (Kaiser Permanente) ^b	443,566	96%	4%
MD-Individual Practice Association, Inc. (M.D. IPA)°	234,488	85%	15%
Optimum Choice, Inc. (OCI) ^c	504,786	85%	15%

^a BlueChoice, a for-profit HMO, operates under a holding company called CareFirst.

Financial Picture

Indicators of financial stability include expense ratios that help explain the financial strength of a health plan. By maintaining a financially strong balance sheet, a health plan remains viable in the marketplace.

The administrative expense ratio represents the percentage of operating revenue used to administer the plan for activities such as provider, membership, marketing, and actuarial management. In theory, a company with a low administrative expense ratio is operating more efficiently than a company with a high ratio. This ratio is influenced by a plan's business mix. Plans with a large number of small employer and self-funded groups tend to have larger administrative expense ratios than plans with a large-group, risk-based membership. According to A.M. Best, average administrative expense ratios are in the 11%–13% range. Best in class companies have administrative expense ratios that are in the high single digits (7%–9%), while less efficient companies typically have not achieved sufficient scale to spread their fixed cost over a large enough population.

Maryland's average administrative expense ratio is 10%, slightly lower than the East Region and the Total Industry, which are both 11%. Over the past five years, Maryland's average administrative expense ratio has remained stable, only varying by one percentage point.

The **medical expense ratio** represents the percentage of premium revenue that is used to pay for the delivery of health

care and indicates how well a plan manages care. If the ratio is too low, under-utilization of services may be a problem. If it is too high, the plan may not be managing utilization appropriately. The medical expense ratio is assessed in context to the administrative expense ratio. The sum of the two should not exceed 100% because this would mean that more is being spent than received in premiums. Non-profits tend to have a higher medical expense ratio because of their community service mission, and this should also be taken into consideration when evaluating financial performance.

On average, Maryland plans spent a slightly greater percentage of premium revenue on medical expenses than plans in the East region (86% vs. 84%) but less than all plans nationally (86% vs. 88%). This means that on average, 86 cents of every dollar received from premiums is spent on health care services. Over the past five years, Maryland's average medical expense ratio has shown some variability, ranging from 91% in 2001 to 84% in 2004.

In addition, four plans received an A.M. Best financial strength rating of A or A- and three received ratings in the B+ range, on a grading scale of A++ to F, with A++ being the highest rating. This indicates that Maryland plans are able to meet their obligations and have a good chance of maintaining a level of financial strength that can withstand unfavorable changes in the business, economic, or regulatory environments.

(Source: A.M. Best Company, November 2006).

b Kaiser Permanente's performance in this report relates to HMO members only. It is the only non-profit HMO operating in Maryland.

^c Two for-profit HMOs, M.D. IPA and OCI, are owned and operated by Mid-Atlantic Medical Services, LLC (MAMSI), a regional holding company and subsidiary of UnitedHealth Group, Inc.

Measuring Quality

DATA SOURCES

The HMO quality evaluation underlying this report is based primarily on two sources of data: the Health Plan Employer Data and Information Set (HEDIS^{®1}) and the Consumer Assessment of Healthcare Providers and Systems (CAHPS^{®2}) survey.

HEDIS

HEDIS is a standard set of performance measures developed by the National Committee for Quality Assurance (NCQA) to assess the quality of care delivered by a plan. HEDIS measures estimate the percentage of all HMO members who received a recommended service. Only members who should have received each service during 2005 were included in the rate calculations; this means the ideal rate for each HEDIS measure of service should approach 100%. For example, all children age two should receive the recommended set of immunizations. For these measures, a higher rate always indicates higher quality. An independent company hired by the State checked each plan's methods for accuracy with the specifications.

CAHPS

CAHPS is a standardized survey that measures members' experience with the care and service their plans provide. Its results offer an indication of how well health plans are meeting their members' expectations.

Maryland plans participate annually in a survey of their adult members using the CAHPS 3.0H questionnaire. An independent company hired by the State conducted the survey of 1,100 HMO/POS members randomly selected from each plan.

COMPARISONS TO THE REGION AND NATION*

In this report, performance of commercial HMOs is compared over time for reporting years 2004–2006 and to regional and national averages in order to create a performance profile of managed care delivery in Maryland. See Table 4 on pages 14–15 for detailed results.

Calculation of regional averages includes HEDIS and CAHPS rates from 40 commercial HMOs in Washington, DC, Delaware, Maryland, New Jersey, Pennsylvania, Virginia, and West Virginia, that reported to NCQA in 2006. Table 2 gives a summary of the demographics of these states and the nation. The national average is based on rates from 274 commercial HMO/POS plans. Both publicly reporting plans and non-publicly reporting plans (plans not identified individually in NCQA's public database) submitting HEDIS information to NCQA are included in the calculations.

COMPARISON OVER TIME

Key improvements or declines in the average performance of Maryland HMO/POS plans for 2004–2006 are noted in the *Summary of Report Measures and Results* table on pages 14–15. Given the small number of Maryland plans and variability in performance from plan to plan, it may be difficult to determine whether any percentage point change is statistically significant, even when the difference is more than a few percentage points. Comparison over time provides an assessment of how consistently Maryland plans deliver care as well as the level of care they deliver. These trends provide an opportunity to determine areas that may require further policy development.

Table 2: United States and Regional Demographics (2005)

	Danulation	Age ¹			Median	Number of	
	Population Size ¹	Children 18 and under	Adults 19-64	65+	Income ²	HMO Plans ³	
United States	292,947,440	27%	61%	12%	46,037	411	
Maryland	5,526,040	26%	62%	12%	58,347	7	
District of Columbia	541,420	22%	66%	12%	NA	5 ⁴	
Delaware	831,480	25%	62%	13%	50,970	4	
New Jersey	8,689,470	26%	61%	12%	59,989	11	
Pennsylvania	12,212,930	25%	61%	14%	45,814	14	
Virginia	7,347,570	26%	63%	11%	54,301	10	
West Virginia	1,791,520	23%	62%	15%	35,234	2	

Sources as reported in Kaiser Family Foundation, 2005 (www.statehealthfacts.org):

¹HEDIS® is a registered trademark of the National Committee for Quality Assurance.

²CAHPS® is a registered trademark of the Agency for Healthcare Research and Quality (AHRQ).

^{*} A t-test was used to determine whether the Maryland average was statistically different from the regional and national averages at the 95% confidence level.

¹ Urban Institute and Kaiser Commission on Medicaid and the Uninsured estimates based on the Census Bureau's March 2005 and 2006 Current Population Survey (CPS: Annual Social and Economic Supplements).

² U.S. Census Bureau, Current Population Survey, 2004–2006 Annual Social and Economic Supplements. Three-Year-Average Median Household Income by State: 2003–2005, available at http://www.census.gov/hhes/www/income/income05/statemhi3.html.

³ The Interstudy Competitive Edge, Part II: Managed Care Industry Report, Table 8, January 2006; available at http://www.healthleaders-interstudy.com/.

⁴ District of Columbia plans include surrounding states.

Maryland Plan Performance—Key Findings

COMPARISON TO THE REGION AND NATION

Overall Results by Area of Care

- Maryland's best overall performance was seen in the Adult's Preventive Care category. It outperformed the Mid-Atlantic region in three of the four measures and the nation in two of the four measures that comprise the category.
- Maryland outperformed the nation in three of the four measures in the Children's Health category.
- For the Chronic Care category, Maryland outperformed the nation in two measures, performed similarly to the nation in two measures, and performed similarly to the region in all four measures. At least relatively speaking, Maryland plan members do not receive an inadequate level of care compared to members of plans regionally and nationally. This is important as chronic diseases are increasingly prevalent in the United States. Diseases such as diabetes and hypertension, when poorly managed, can lead to complications or death.
- In 2006, the number of times that Maryland outperformed the nation was higher than the number of times that it outperformed the Mid-Atlantic region, as shown in Table 3.
 Maryland performed significantly better than the nation in 7 of 20 measures, while it performed better than the region in 3 of 20 measures.
- Opportunities for improvement do exist. The majority of Maryland's below-average performances were in comparison to the region (nine compared to five for the nation). Of the nine measures, three are in Member Satisfaction, three are in Children's Health, and three are in Behavioral Health Care.
- Maryland continued to perform below the nation and the region in Member Satisfaction, showing that on average, members in the nation and in the region have a more positive perception of their experience with the care and services that their plans provide. This is the only category in which the Maryland plans performed below the national average for all measures. Maryland also performed below the regional average for three of the four measures in this category.

 Maryland performed similarly to the nation and to the region in eight measures. Maryland's performance was the same as the region for all measures in the Chronic Care category and the same as the nation for all measures in the Behavioral Health Care category.

Measure-Specific Results

Below is a list of measures for which Maryland was statistically lower or higher than both the region and nation in HEDIS 2006 reporting.

Higher than both the nation and region:

- Chlamydia Screening
- · Colorectal Cancer Screening

Lower than both nation and region:

- Few Consumer Complaints
- Getting Care Quickly
- Rating of Health Care
- Maryland has consistently performed below both the region and nation for the current three-year period on Rating of Health Care and Getting Care Quickly.
- As in 2005, Maryland performed higher than both the national and regional averages in the two screening measures, Chlamydia Screening and Colorectal Cancer Screening.

TRENDS

Comparisons over the three-year period (2004-2006) showed no statistically significant changes in measures, indicating that Maryland's performance on these measures has been consistent over this period. While not statistically significant, several measures showed increases of five percentage points and higher, with the highest being 12 percentage points.

A summary of the results for all measures is included on pages 14–15 of this report. Detailed measure results begin on page 5.

Table 3: Overview of Maryland's Performance Compared to the Region and Nation, 2006

	Number of Measures Above Average Compared to	Number of Measures Below Average Compared to	Number of Measures the Same Compared to	Number of Measures
Region	3	9	8	20
Nation	7	5	8	20

Member Satisfaction

RESULTS

- Rating of Health Plan: Thirty-eight percent of Maryland plan members rated their health plan a 9 or 10. This is statistically equivalent to the proportion of members in the region who gave their plans this rating, but it falls below the national average.
- Consumer Complaints: Relative to the number of Maryland plan members who reported that they had called or written their health plan with a complaint during 2005, the majority (85%) reported satisfactory experiences with their health plans. On average, members regionally and nationally reported fewer instances of member complaints than Maryland plan members.
- **Getting Care Quickly:** Maryland's performance on this measure was statistically lower than both the region and nation, differing from each by five percentage points.
- Rating of Health Care: Forty-seven percent of Maryland plan members rated their health care 9 or 10, compared to 52% for the region and 53% for the nation. The Maryland average was lower than the regional and national averages by a statistically significant margin.

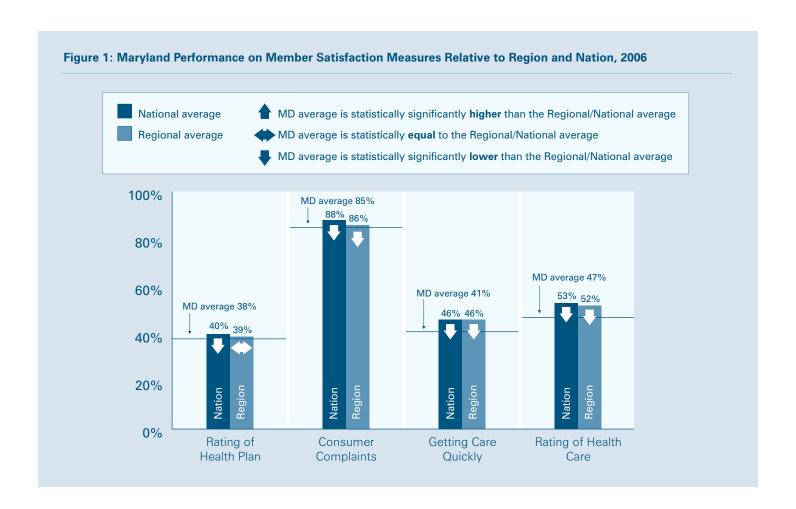
MEASURE DEFINITIONS

Rating of Health Plan—Percentage of members who rated their health plan 9 or 10 on a scale of 0–10, with 10 being the "best health plan possible."

Consumer Complaints—Percentage of members who said they "did not call or write their health plan with a complaint or problem" in the last 12 months.

Getting Care Quickly—Percentage of members who said "always" to all of four related questions that make up this composite satisfaction measure. The questions ask members how quickly they received help, advice or care; got an appointment; or were examined.

Rating of Health Care—Percentage of members who rated overall care received 9 or 10 on a scale of 0–10, with 10 being the "best health care possible."

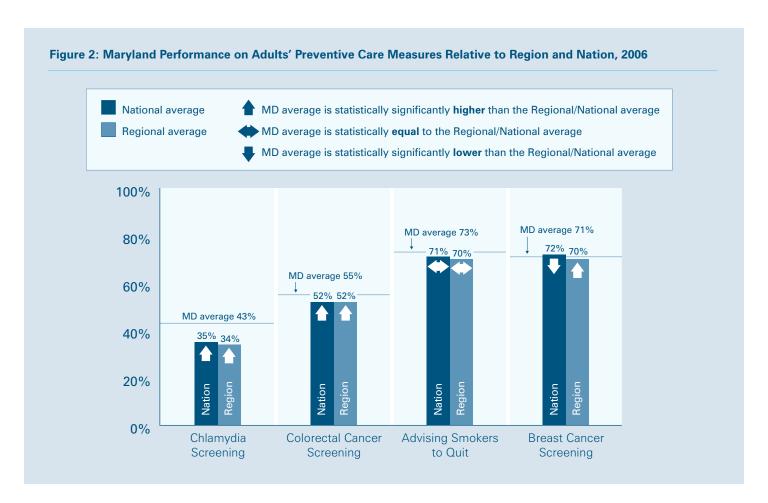


Adults' Preventive Care

RESULTS

- Chlamydia Screening: When compared to the regional and national averages, a significantly higher proportion of Maryland plan members received chlamydia screening in 2005. Chlamydia is the most commonly reported sexually transmitted disease in the United States, with approximately 18,308 cases reported in Maryland in 2005 (Maryland Department of Health and Mental Hygiene). Despite this and the fact that it is easily treated with antibiotics (CDC, 2006), the rate for this measure tends to be lower compared to rates for the other screening measures. The Maryland 2006 average of 43% represents an increase of five percentage points between 2004 and 2006. This measure, when compared to the rates of the two other screening measures included in this section, remained consistently lower for all three years.
- Colorectal Cancer Screening: According to the American Cancer Society (2006), more than nine in ten people whose colorectal cancer is detected and treated early live five years or longer. Less than one-third of these cases are associated with a family history of the disease. Although these statistics highlight the importance of screening, colorectal cancer screening rates are generally lower than those for other common cancer screenings. For example, the Maryland average was 16 percentage points lower than the rate for

- Breast Cancer Screening. Nevertheless, Maryland performed significantly better than both the region and the nation and its rate increased six percentage points between 2004 and 2006. The rising rate reflects a positive trend in disease identification and prevention.
- Advising Smokers to Quit: This is the only measure included in
 this section in which Maryland performed similarly to both the
 nation and region. Maryland's performance on this measure
 remained level (73%) between 2004 and 2006. These rates
 show that counseling to quit smoking is not changing, despite
 the potential to prevent deaths attributable to this lifestyle
 behavior. The World Health Organization (2006) reports that
 smoking leads to 440,000 premature deaths nationally per
 year. Approximately 19.7% of Maryland adults are smokers,
 and advice from providers can be helpful in encouraging
 these smokers to quit (American Lung Association, 2005).
- Breast Cancer Screening: Notably, the Maryland average for this measure was significantly higher than the region but was lower than the nation by a statistically significant margin. Maryland's performance for this measure decreased by five percentage points between 2004 and 2006.



MEASURE DEFINITIONS

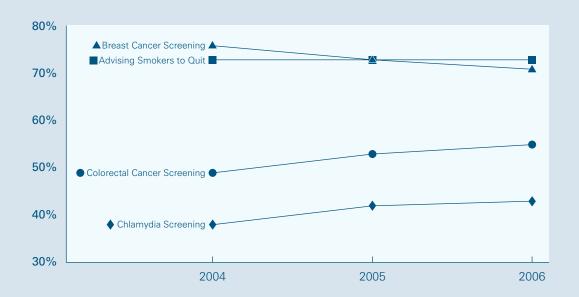
Chlamydia Screening—Percentage of women ages 16–25 who received a test for chlamydia during measurement year 2005.

Colorectal Cancer Screening—Percentage of adults ages 50-80 who received a screening for colorectal cancer.

Advising Smokers to Quit—Percentage of smokers ages 18 and older who received advice from their provider to quit smoking.

Breast Cancer Screening—Percentage of women ages 50–69 who had a mammogram in the measurement years 2004 or 2005.

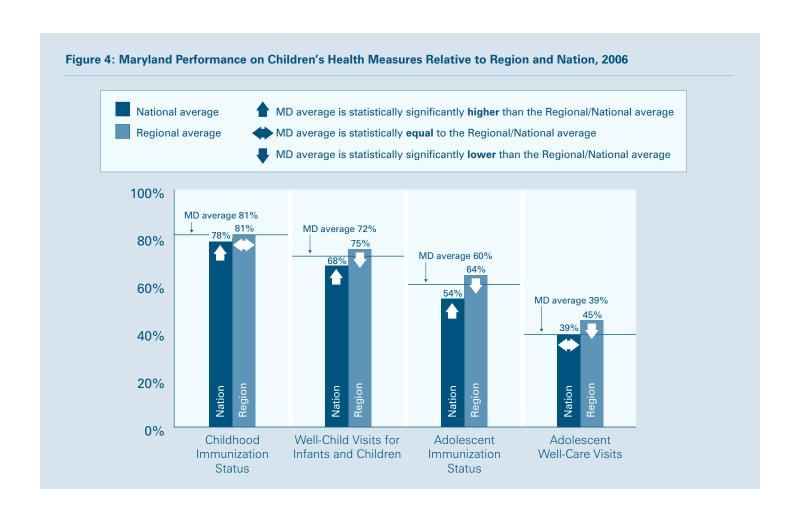




Children's Health

RESULTS

- Childhood Immunization Status: Maryland's performance on this measure was the same as the region but significantly better than the nation's performance. It is important to note that only 78% of all children nationally received the full complement of recommended immunizations, although immunizations are one of the safest and most effective ways to protect children from a variety of potentially serious childhood diseases. Between 2004 and 2006, Maryland's performance on this measure improved, reaching a six percentage point increase during this three-year period.
- Well-Child Visits for Infants and Children: Infants and children should pay visits to their pediatricians, according to schedules and recommendations developed by the American Academy of Pediatrics, but the rate at which this occurs is not optimal. Nationally, only 68% of infants and children received recommended well-child visits, compared to 72% in Maryland and 75% in the region. Similar to its performance on the Adolescent Immunization Status measure, Maryland's performance is statistically above the nation but below the region.
- Adolescent Immunization Status: Immunizations also play
 a key role in protecting the health of adolescents. Overall,
 performance on this measure lagged behind performance
 on the Childhood Immunization Status measure. Maryland
 performed significantly below the region but significantly
 better than the nation. The Maryland average for this measure
 also increased substantially between 2004 and 2006, by 12
 percentage points.
- Adolescent Well-Care Visits: In 2006, Maryland Plans reported that on average, 39% of adolescents had a wellcare visit in measurement year 2005, which is significantly lower than the regional average but similar to the national average. Between 2004 and 2006, the Maryland average for this age demographic remained comparatively lower than the children's well-care rate.



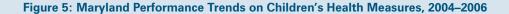
MEASURE DEFINITIONS

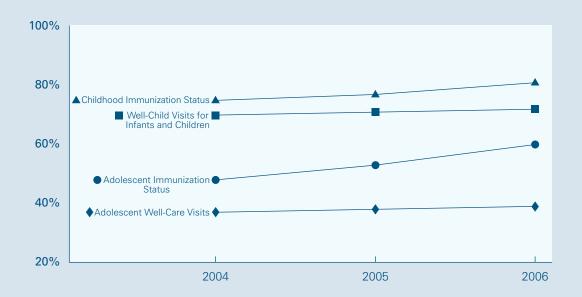
Childhood Immunization Status—Percentage of children who received immunizations by age two for measles, mumps, and rubella (MMR); polio; influenza type b; hepatitis B; chicken pox (VZV); and diphtheria, tetanus, and pertussis (DTaP/DT).

Adolescent Immunization Status—Percentage of adolescents who received immunizations by age 13 for MMR, hepatitis B, and chicken pox.

Well-Child Visits for Infants and Children—Combined percentages of infants who had 6 or more visits by age 15 months and children ages 3–6 years who had at least 1 visit to a primary care provider during measurement year 2005.

Adolescent Well-Care Visits—Percentage of adolescents ages 12–21 who had at least one visit to a primary care provider during measurement year 2005.

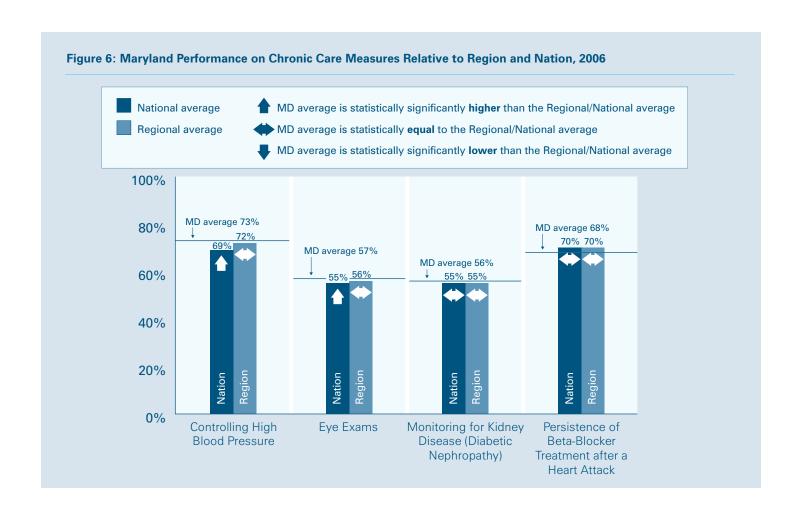




Chronic Care

RESULTS

- Controlling High Blood Pressure: Research shows that despite available effective treatment options, high blood pressure is not controlled in 65% of the people who have it (Wang & Vasan, 2006), increasing their risk of stroke, coronary heart disease, and other cardiovascular problems. Maryland HMO members have a higher rate of blood pressure control than members of HMOs nationally. Seventy-three percent of Marylanders who were hypertensive had controlled levels of blood pressure, compared to 69% for the nation. Between 2004 and 2005, Maryland's performance increased by one percentage point, but between 2005 and 2006, it increased by seven percentage points, though this change was not statistically significant.
- Eye Exams: Diabetic retinopathy causes 12,000–24,000 new cases of blindness annually, highlighting the importance of regular eye exams for diabetics (National Institute of Diabetes and Digestive and Kidney Diseases, 2006). Fifty-seven percent of adult plan members with diabetes had eye exams, a measurably larger proportion of persons compared to 55% for the nation.
- Monitoring for Kidney Disease (Diabetic Nephropathy): In the United States, diabetics account for 45% of new cases of kidney failure annually (National Institute of Diabetes and Digestive and Kidney Diseases, 2006). Prevalence can be reduced with adequate monitoring. In reporting year 2006, results show that only 55% of diabetics nationwide received a checkup or treatment for kidney disease, even though this is recommended for everyone diagnosed with diabetes. Maryland performed similarly to the nation and the region. Though performance on this measure is generally low across the nation, Maryland's performance increased by eight percentage points between 2004 and 2006.
- Persistence of Beta-Blocker Treatment After a Heart Attack:
 Maryland's performance on this measure was 68%, similar
 to the region and to the nation. At this rate, nearly one-third
 of people who were hospitalized for a heart attack did not
 remain compliant with this treatment regimen during the six month period following their discharge. This measure was
 introduced and reported for the first time in HEDIS 2005.



MEASURE DEFINITIONS

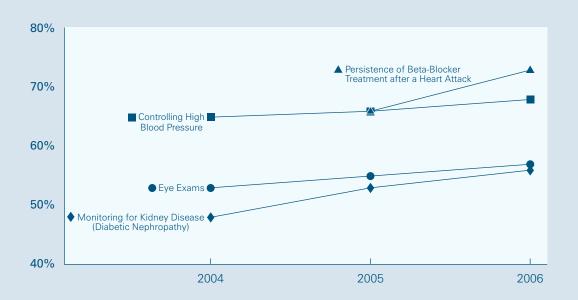
Controlling High Blood Pressure—Percentage of hypertensive adults ages 46–85 who had controlled levels of blood pressure (no higher than 140mm Hg systolic and 90mm Hg diastolic) during measurement year 2005.

Eye Exams—Percentage of adult members with diabetes who had an eye screening for retinal disease in measurement year 2005 (or in measurement year 2004, if the retinal exam was normal).

Monitoring for Kidney Disease (Diabetic Nephropathy)—Percentage of adult members with diabetes who were checked or treated for diabetic nephropathy.

Persistence of Beta-Blocker Treatment After a Heart Attack—Percentage of members ages 35 and older who were hospitalized due to a heart attack and received a prescription for beta-blockers for at least six months after discharge.



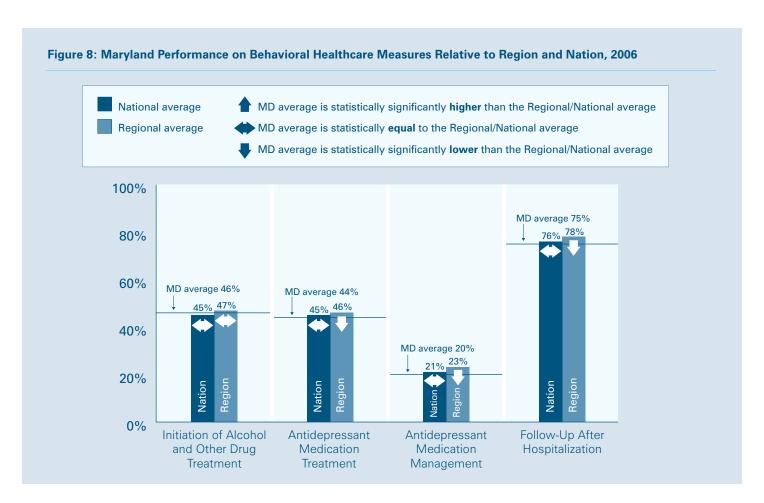


Behavioral Healthcare

RESULTS

- Initiation of Alcohol and Other Drug Treatment: This is the only measure in the behavioral healthcare category for which Maryland performed similarly to both the region and the nation. Between 2004 and 2006, Maryland saw an increase of 11 percentage points, from 35% to 46%, in the rate of patients with alcohol or other drug dependence (AOD) who initiated treatment. Research supports the need for people with chemical dependencies to engage in ongoing treatment to prevent relapse. A brief intervention of four or fewer sessions by a health professional has shown to motivate alcoholdependent patients to enter long-term alcohol treatment and help some to abstain completely (Enoch & Goldman, 2002).
- Antidepressant Medication Treatment: Maryland's performance fell below the regional average but was about the same as the national average. When results for these two measures are considered together, the data show that a higher proportion of members diagnosed with depression are more likely to continue antidepressant drug therapy treatment for a prolonged period of time than they are to have the recommended minimum level of contacts with a primary care physician or mental health provider during the acute phase of the condition. Although 20% of members with depression received at least three follow-up visits with a

- primary care provider in the acute treatment phase, a higher percentage (44%) of members maintained drug therapy treatment for at least six months.
- Antidepressant Medication Management: Contact with a mental health care provider helps patients with depression in their management of symptoms and allows for professional oversight of the effects of the prescribed antidepressant. Maryland's performance in 2006 fell statistically below the region's average but was similar to the national average.
- Follow-Up After Hospitalization: Compared to other behavioral health measures included in this report, Maryland's performance was highest for this measure of care; however, overall Maryland plans performed below the regional average. Twenty-five percent of Maryland members who received inpatient treatment for a mental health disorder did not receive a follow-up visit within 30 days of discharge, as is recommended. Appropriate treatment and follow-up of mental illness can reduce the duration of disability from mental illness and the likelihood of recurrence. Between 2004 and 2006, Maryland's performance increased by five percentage points.



MEASURE DEFINITIONS

Initiation of Alcohol and Other Drug Treatment—Percentage of members with AOD who initiated treatment through an inpatient admission or outpatient services within 14 days of diagnosis.

Antidepressant Medication Management—Percentage of members newly diagnosed with depression and being treated with an antidepressant, who received at least three follow-up visits with a primary care physician or mental health provider in the 12-week acute treatment phase.

Antidepressant Medication Treatment—Percentage of members diagnosed with depression who took their antidepressant medication for at least six months.

Follow-Up After Hospitalization—Percentage of members ages 6 and older who received inpatient treatment for a mental health disorder and who had a follow-up visit with a provider within 30 days of discharge.



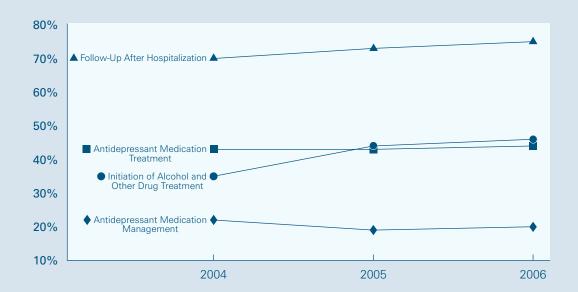


Table 4: Summary of Report Measures and Results 2004–2006

Measure	Maryland 2004	Maryland 2005	Maryland 2006	Maryland Change 2004-2006	Region 2006
Member Satisfaction					
Rating of Health Plan	34%	36%	38%	4%	39%
Consumer Complaints	86%	86%	85%	-1%	86%
Getting Care Quickly	42%	44%	41%	-1%	46%
Rating of Health Care	45%	45%	47%	2%	52%
Adult's Preventive Care					
Chlamydia Screening	38%	42%	43%	5%	34%
Colorectal Cancer Screening	49%	53%	55%	6%	52%
Advising Smokers to Quit	73%	73%	73%	0%	70%
Breast Cancer Screening	76%	73%	71%	-5%	70%
Children's Health					
Childhood Immunization Status	75%	77%	81%	6%	81%
Well-Child Visits for Infants and Children	70%	71%	72%	2%	75%
Adolescent Immunization Status	48%	53%	60%	12%	64%
Adolescent Well-Care Visits	37%	38%	39%	2%	45%
Chronic Care					
Controlling High Blood Pressure	65%	66%	73%	8%	72%
Eye Exams	53%	55%	57%	4%	56%
Monitoring for Kidney Disease (Diabetic Nephropathy)	48%	53%	56%	8%	55%
Persistence of Beta-Blocker Treatment after a Heart Attack	NA	66%	68%	NA	70%
Behavioral Health Care					
Initiation of Alcohol and Other Drug Treatment	35%	44%	46%	11%	47%
Antidepressant Medication Treatment	43%	43%	44%	1%	46%
Antidepressant Medication Management	22%	19%	20%	-2%	23%
Follow-Up After Hospitalization	70%	73%	75%	5%	78%

NA—This measure was introduced and reported for the first time in HEDIS 2005

Note: Measures within each category are ranked in descending order by the difference between Maryland and the region. Differences are in percentage points.

LEGEND

♠ = Maryland HMO/POS average is higher than the regional/national average by a statistically significant margin

⇒ = Maryland HMO/POS average is statistically equal to the regional/national average

Maryland HMO/POS average is lower than the regional/national average by a statistically significant margin

Difference Between Maryland and Region (2006)	Maryland Performance Compared to Region (2006)	Nation 2006	Difference Between Maryland and Nation (2006)	Maryland Performance Compared to Nation (2006)
-1%	*	40%	-2%	•
-1%	•	88%	-3%	•
-5%	•	46%	-5%	
-5%	•	53%	-6%	
9%	•	35%	8%	•
3%	•	52%	3%	•
3%	*	71%	2%	*
1%	•	72%	-1%	•
0%	*	78%	3%	•
-3%	•	68%	4%	•
-4%	•	54%	6%	•
-6%	•	39%	0%	*
1%	*	69%	4%	•
1%	*	55%	2%	•
1%	*	55%	1%	*
-2%	*	70%	-2%	*
-1%	*	45%	1%	*
-2%	•	45%	-1%	*
-3%	•	21%	-1%	*
-3%	•	76%	-1%	*

Promoting Electronic Health Information Exchange in Maryland

Attention to the use of information technology (IT) in health care has rapidly intensified since President Bush announced in January 2004 the goal of widespread adoption of electronic health records (EHRs) by the year 2014. Enabling electronic health information exchange (HIE) through the use of tools, such as EHRs and computerized provider order entry, will modernize the American health care system by improving the quality and accuracy of medical diagnoses, treatments, and prescriptions, while reducing health care costs. The exchange of health information electronically between providers—interoperability—requires standardized, structured data systems to facilitate the transfer process; however, agreeing on a standard poses many challenges.

BUILDING THE INFRASTRUCTURE

Community health information networks (CHINs) created in the 1990s established the nexus between information technology and health care quality. These local networks were designed to support data sharing through a central point of access and represented early organizational attempts at building an infrastructure capable of supporting interoperability between databases. "Ultimately poor buy-in, concerns with data ownership, lack of trust, lack of financing, and high cost of network technology led to failure of most of the networks." (Luo, 2006)

Local demonstration projects and government interests in building a communication infrastructure have continued beyond the early models of the 1990s. The United States Department of Health and Human Services announced in 2005 its award of contracts totaling \$18.6 million to four groups of health care and health information technology organizations for the purpose of developing prototypes for a Nationwide Health Information Network (NHIN) architecture. The four organizations—IBM, Computer Sciences Corporation, Accenture, Ltd., and Northrop Grumman Corporation—will lead their consortia in developing information technology structures and network prototypes that provide for secure information sharing within each market. Further, the consortia will work to ensure that information can move seamlessly between each of the four networks, thereby establishing a single infrastructure among all of the project's participants (DHHS, 2005).

Once created, the architecture design for each of the networks will be placed in the public domain for further innovations.

Phase I of this project ended December 2006. Consortia focused on:

- Developing four potential architectures for health information exchange,
- Developing prototypes that demonstrate viability of the proposed architectures in the clinical setting, and
- Developing business models for sustaining an NHIN (Cothren, 2006).

HEALTH INFORMATION EXCHANGE INFLUENCES

Potential benefits of HIE include the following:

- Reduced Medical Errors
- Improved resource utilization
- · Accelerated knowledge diffusion
- · Decreased variations in healthcare delivery and access
- Empowered consumers
- Strengthened data privacy and protection

However, the American health care system remains overwhelmingly paper-based, and its use of information technology lags behind that of other industries by as much as 10-15 years. Availability of the technology has not hastened adoption of EHRs. A comprehensive review of responses collected using the National Ambulatory Medical Care Survey, as published in the September 2005 issue of Health Affairs, shows that practice ownership served as a strong indicator of the likelihood of practitioner adoption of EHRs. For purposes of grouping practitioners, responses were categorized by ownership: physician or physician group; health maintenance organization; and all other health care organizations. Physicianowned practices had the lowest probability of using EHRs, with only 15.6% reporting use of the technology. Comparatively, physicians working in HMOs showed a stronger endorsement and employment of EHRs, with nearly half of these practitioners reporting their use. The effect of the relatively broad uptake of the technology among HMO-owned practices does not foretell the pace of practitioner conversion. Proportionally, HMO-owned practices represent 86.1% of office-based physicians, while less than 2% of physicians work for HMO-owned practices.

Significant obstacles must be overcome before an efficient, secure, and interoperable system of electronic health information exchange becomes a reality. Cost is the most often cited barrier to widespread adoption of HIE. This is especially true for physicians in rural or poorer communities, and those in small practices, because of the relatively high initial capital investment required to acquire the necessary hardware, and to acquire, maintain, and update the software applications that enable the technology. A study supported by The Commonwealth Fund estimates that the initial cost of implementing an EHR in the ambulatory setting would range from \$37,056–\$63,600 per physician (Miller et al., 2005). Costs and complexities confronting hospitals and other large institutional settings are exponentially higher.

The most serious potential obstacle to the adoption and widespread use of a robust system of electronic health information exchange is the public's concerns over the privacy, confidentiality, and security of electronically-shared health information—concerns that become heightened with every media report of a lost or stolen laptop full of sensitive

and personally-identifiable health data. Although sound technology and strict authorization and access policies may make electronic sharing of health information more secure than under the current paper-based system, polls continue to find consumers quite concerned about unauthorized access and use of their most personal information. A 2005 poll found that 70% of respondents were concerned that sensitive personal information would be leaked because of flawed data security, while 69% were concerned that there could be sharing of medical information without a patient's knowledge and consent (Alliance for Health Reform, 2006).

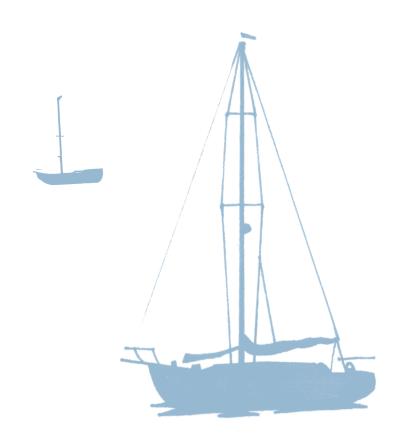
HEALTH INFORMATION EXCHANGE ACTIVITIES IN MARYLAND

In parallel with the federal government's HIE agenda, Maryland, like other states, has launched initiatives that are an important part of nationwide HIE strategies and which, at the same time, reflect local priorities. A number of states are facilitating statewide regional health information organizations (RHIOs). As early as 2001, movement toward a medical information exchange had begun in Maryland. Public and private sector organizations formed a coalition to specifically target issues confronting the emergence of such a communication system. Key academic healthcare systems—Johns Hopkins Medicine, University of Maryland Medicine, and MedStar Health—have joined the partnership. "The coalition's primary objective is the establishment of a RHIO infrastructure linking all components in the Maryland/D.C. healthcare delivery chain—physician offices, hospitals, clinics, labs, imaging centers, nursing homes, payers and patients—to secure, and appropriate, exchanges of health information." (eHealth Initiative, n.d.)

The Maryland Health Care Commission works at the state-level toward the development of a long-term, sustainable plan for supporting the effective, efficient, and secure exchange of health information across the spectrum of Maryland's health care stakeholders. As part of an overall reorganization of its constituent divisions, the Commission created a Center for Health Information Technology. The Commission has over the past year supported the work of the Task Force to Study Electronic Health Records, established by legislation enacted by the Maryland General Assembly during its 2005 session to study the current use and potential expansion of electronic health records across the state. Its 26 members include representatives of the Maryland Senate and the House of Delegates, the Office of the Attorney General, the Johns Hopkins and the University of Maryland Schools of Medicine, the federal Veterans Administration, as well as 20 members appointed by the Governor to represent a broad range of provider and consumer interests, as specified in the enabling legislation.

One of the first initiatives undertaken by the new Center for Health Information Technology was a cooperative effort with the Health Services Cost Review Commission (HSCRC) to design and operationalize a process for developing a long-term, sustainable model for the effective, efficient, and secure exchange of health information across the spectrum of health care stakeholders, by identifying and funding the most promising pilot projects for such an exchange. Each Commission has adopted regulations to establish an interrelated process whereby MHCC will receive and evaluate applications for HIT projects and recommend them for funding by HSCRC through small assessments to the rates of the hospitals involved, as part of the multi-stakeholder groups that will propose these pilot projects.

The Commission will assess how organizational business policies and practices, as well as State laws regarding privacy and security, could affect the regional and statewide exchange of electronic health information. Advisory groups representing a broad spectrum of health care business sectors are examining ways in which differences between federal and State privacy laws, and variations in the business practices between sectors, may affect the interoperability of systems wishing to share electronic patient information. Commission staff also formed an advisory group of attorneys to work on this project; the group will focus on examining the differences between federal and State rules governing the privacy and permitted disclosures of protected health information and the legal implications of a wider use of electronic health records on the confidentiality and security of this sensitive information.



Marketplace Perspective

HEALTH CARE INFLATION

The rising cost of health care continues to draw national attention and is a major concern for purchasers and consumers alike. In 2006, premiums for employer coverage increased an average of 6% to 7.7% (Milliman, 2006 and Kaiser Family Foundation, 2006). While the inflation for health insurance premiums increased at a rate twice that of the Consumer Price Index, this pricing change represents the smallest average, annual increase since 1997. During the high inflationary periods, HMOs did not necessarily reap windfall profits. According to Milliman USA, which tracks HMO financial data, data analysis in 2002 forecasted average premium increases of 17% in 2003. However, HMO profit margins hovered close to zero for the year, continuing a multi-year trend. Milliman noted that PPOs have proven profitable for insurers because of lower administrative costs and other differences not typical of HMOs (Medical Economics, 2003).

Premium increases translate into a larger share of dollar contributions made by workers but not necessarily more of their income. Between 2000 and 2006, employees' share of monthly premiums increased from \$28 to \$52 for single coverage and from \$135 to \$248 for family coverage. Although dollar contributions made by workers have increased, the percentage of their contribution has remained stable at 16% since 2000 (Alliance for Health Reform, 2006).

On average, Maryland residents pay a greater share of health care insurance premiums, compared to residents of other states. In 2004, Marylanders contributed 22% for single coverage and 30% for family coverage, compared to the national rates of 18% and 24%, respectively (Kaiser Family Foundation, 2006).

Many opportunities exist for states to make substantial inroads by forming public-private partnerships. Massachusetts, in its landmark 2006 health insurance reform legislation, serves as a recent example of a state linking with non-government organizations to strengthen the health care system through quality improvement initiatives. The legislation calls for the establishment of a Health Care Quality and Cost Council, which will include public and private officials from a variety of fields who are given the singular directive of reducing costs by improving quality (Democratic Leadership Council, 2006).

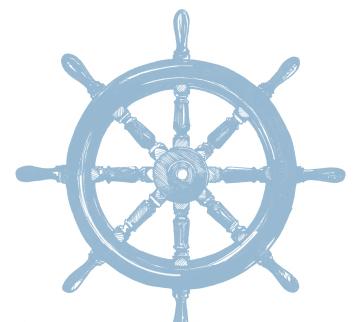
TRANSPARENCY IN HEALTH CARE

Policy makers and employers are embarking on new approaches to slow the pace of rising costs and accelerate improvements in quality. One strategy being advanced is the idea of making cost and quality information widely available to consumers—transparency. This concept has gained rapid momentum with the Executive Order signed in August 2006 directing federal agencies that administer or sponsor federal health insurance programs to provide the public with more cost and quality information and adopt approaches that improve quality and efficiency.

Public release of performance information through avenues such as "report cards" creates an incentive for plans, providers, and health care delivery entities to perform at optimal standards (Alliance for Health Reform, 2006). Although studies have systematically shown that consumers do not use comparative information on quality, the public exposure remains a compelling influence in providers' willingness to self-assess and self-correct.

Private and government employers have leveraged their use of quality benchmarks by including them in their purchasing negotiations. Value-based purchasing has now reached the level of individual consumers as stakeholders grapple to equitably exercise cost management and keep an unrelenting focus on achieving high quality health care for all. Evolution toward these laudable goals pairs pricing transparency with quality information not as a guarantee but as a promise of the possibility that consumers will become proactive purchasers of health care. Policy makers, factoring centrally in the discussions, face an intricate proposition of how to reasonably balance the "value equation" for their constituents. Paul B. Ginsburg, Ph.D., President of Center for Studying Health System Change, projected in his testimony before Congress, "The greatest opportunities may lie in the areas of information on provider quality and the funding of research on medical effectiveness." (Ginsburg, 2006)

Finally, as policy makers debate and develop the laws to guide the generation of transparency tools, the reality of market limitations will necessarily temper discussions on estimates of the effect of transparency on runaway costs and quality shortfalls. Karen Davis, Ph.D., president of The Commonwealth Fund stated, "health care is not a 'homogeneous commodity' and conditions required for perfectly competitive markets do not exist in health care, making the health care market quite different than markets for other goods and services." (Physicians News Digest, 2006)



Future Directions

MHCC required Maryland plans to report six new HEDIS measures in 2006. Below is a brief overview of the measures, along with the Maryland averages. Since these are first-year measures, results will be used for further evaluation and to determine whether there is a need to adjust the measure specifications. Rates for first-year measures will likely shift in the second year of data collection either because of subsequent specification refinements or plan experience with data collection.

- Disease Modifying Anti-Rheumatic Drug (DMARD) Therapy: Assesses whether patients diagnosed with rheumatoid arthritis have been prescribed a DMARD. On average, Maryland plans reported that 80% of members diagnosed with rheumatoid arthritis received a DMARD during measurement year 2005.
- Follow-Up Care for Children Prescribed Attention-Deficit/
 Hyperactivity Disorder (ADHD) Medication: Produces two
 rates that indicate follow-up care for children prescribed an
 ADHD medication. On average, Maryland plans reported that
 31% of members diagnosed with ADHD had an ambulatory
 prescription and one follow-up visit during the 30-day
 Initiation Phase, while 91% of members who were compliant
 for the Initiation Phase remained on the medication for at
 least 210 days and had at least two additional follow-up visits
 within nine months after the initiation phase ended, during
 measurement year 2005 (Continuation and Maintenance
 Phase).

- Inappropriate Antibiotic Treatment for Adults with Acute Bronchitis: Assesses whether antibiotics were inappropriately prescribed for healthy adults with bronchitis. A lower rate represents better performance. On average, Maryland plans reported that 72% of otherwise healthy adult members diagnosed with acute bronchitis received an antibiotic within three days after the episode date during measurement year 2005.
- Use of Spirometry Testing in the Assessment and Diagnosis
 of Chronic Obstructive Pulmonary Disease (COPD): Assesses
 whether adult members newly diagnosed with COPD in
 2005 received spirometry testing to confirm the diagnosis.
 On average, Maryland plans reported that 34% of members
 who were diagnosed with COPD received spirometry testing
 during measurement year 2005.
- Annual Monitoring for Patients on Persistent Medication:
 Evaluates the percentage of adult members who took
 persistent medications and also received annual monitoring
 for the following five drugs: Angiotensin-converting enzyme
 (ACE) inhibitors/Angiotensin II receptor blockers (ARB);
 digoxins; diuretics; anticonvulsants; and statins. On average,
 in measurement year 2005, Maryland plans reported that
 73% of members on persistent medications received annual
 monitoring for these groups of medications.
- Antibiotic Utilization: Summarizes outpatient use of antibiotics. On average, Maryland plans approved 247,965 antibiotic prescription dispensing events, which translate into 0.89 prescriptions annually per member per year.

Maryland Performance Evaluation Guides

As part of its HMO quality and performance evaluation system, MHCC produces a series of reports covering commercial HMO performance. The series of four reports targets different audiences based on their interests and needs. In addition to this publication, MHCC produced the following annual HMO reports.

- Measuring the Quality of Maryland HMOs and POS Plan: 2006/2007 Consumer Guide provides inter-plan comparison on a subset of measures selected for their interest to people having or seeking insurance from commercial HMOs. This information is intended to help consumers and purchasers assess the relative quality of services offered by commercial managed care plans. The 2006/2007 Consumer Guide was publicly released on November 1, 2006. Approximately 100,000 Guides (in various forms) are provided to Marylanders when they choose their health insurance coverage each year, as well as to legislators and other stakeholders.
- The 2006 Comprehensive Performance Report: Commercial HMOs & Their POS Plans in Maryland provides detailed data, including trending information, on the performance

- of Maryland HMOs across a large number of measures. The inclusion of more measures and greater detail allows academic, health care industry, and policy-making audiences to use the data for analytic purposes.
- Measuring the Quality of Maryland HMOs and POS Plans: State Employee Guide contains information that is similar to the Consumer Guide but discusses only HMO/POS plans that are offered to state employees (available in spring 2007).

In addition to the publications listed above, MHCC, in consultation with the Department of Health and Mental Hygiene and the Department of Aging, produces three Web-based, interactive Guides: Maryland Nursing Home Performance Evaluation Guide, Maryland Hospital Performance Evaluation Guide, and the Maryland Ambulatory Surgery Facility Consumer Guide (printed versions available).

All Maryland Health Care Commission HMO/POS plan publications are available on the Internet at http://www.mhcc.maryland.gov.

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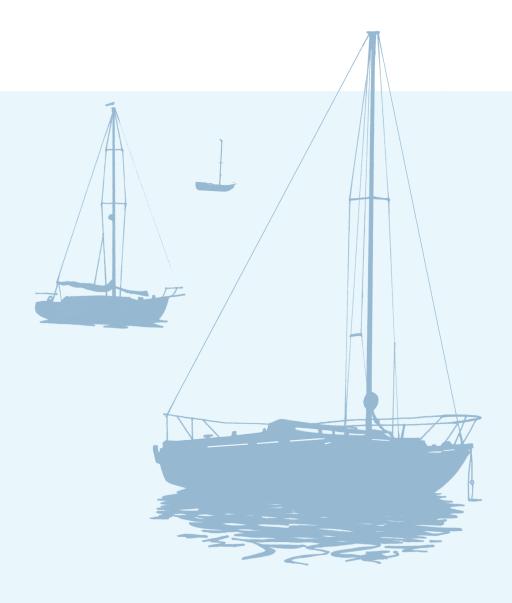
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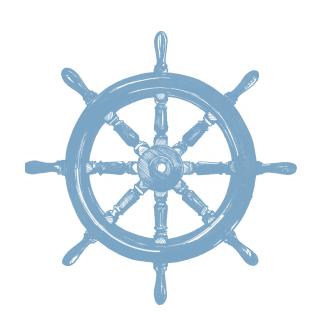
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ABOUT THE MARYLAND HEALTH CARE COMMISSION

The Maryland Health Care Commission (MHCC) is an independent, 15 member commission appointed by the Governor with the advice and consent of the Maryland Senate. A primary charge of the Commission is to evaluate and publish findings on the quality and performance of commercial health maintenance organizations (HMOs) that operate in Maryland. MHCC produces this report annually with the cooperation of Maryland HMOs and their members. These annual performance reports are the only source of objective, independently audited information on the quality of Maryland commercial HMOs. More information about MHCC and the performance reports it produces is available at http://mhcc.maryland.gov.







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